

WHAT IS CLAIMED IS:

1. A magnetic recording and reproduction apparatus, comprising:

a main chassis having a rotatable head cylinder provided thereon; and

a sub chassis on which a tape cassette is mountable; wherein:

the sub chassis is movable with respect to the main chassis between a tape cassette mountable position and a tape pull-out completion position, and the tape cassette mountable position is a position at which the tape cassette is mountable on the sub chassis and the tape pull-out completion position is a position at which information recording to, and information reproduction from, the tape which has been pulled out from the tape cassette and wound around the rotatable head cylinder can be performed;

a pivotable body is provided on the main chassis; the pivotable body has a projection provided thereon; and the projection on the pivotable body is engaged with a cam groove in the sub chassis so as to pivot the pivotable body, and thus the cam groove is restricted by the projection on the pivotable body, so that the sub chassis moves with respect to the main chassis;

the cam groove has a width which is substantially identical to the diameter of the projection on the pivotable body; and

the cam groove includes a first arc portion, a second arc portion continuous with the first arc portion, and a straight portion continuous with the second arc portion; and the first arc portion and the second arc portion have identical radii, and are projected in opposite directions

to each other.

2. A magnetic recording and reproduction apparatus, according to claim 1, wherein when the sub chassis is at the tape cassette mountable position, the projection is engaged with the first arc portion; when the sub chassis is at the tape pull-out completion position, the projection is engaged with the second arc portion; and when the sub chassis is between the tape cassette mountable position and the tape pull-out completion position, the projection is engaged with one of the straight portion and the second arc portion.

3. A magnetic recording and reproduction apparatus, according to claim 1, wherein a radius of an arc passing through the center of the first arc portion in the circumferential direction thereof, a radius of an arc passing through the center of the second arc portion in the circumferential direction thereof, and a radius of an arc drawn by the center of the projection on the pivotable body when the projection on the pivotable body moves about the center of the pivotable body, are identical to each other.

4. A magnetic recording and reproduction apparatus, according to claim 1, wherein:

when the projection is at a tape cassette take-out position, the projection is engaged with the first arc portion at a first position of the first arc portion, and when the projection is at a tape cassette insertable position, the projection is engaged with the first arc portion at a second position of the first arc portion which is different from the first position of the first arc portion; and

when the projection is at a tape running position,

the projection is engaged with the second arc portion at a first position of the second arc portion, and when the projection is at a stop position, the projection is engaged with the second arc portion at a second position of the second arc portion which is different from the first position of the second arc portion.